

	Type	L #	Hits	Search T xt	DBs	Tim Stamp	Com men ts	Err or Def in tio n	Er ro rs
1	BRS	L1	7	glycerophosphodiester adj phosphodiesterase	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:44			0
2	BRS	L2	53	regulator same (G adj protein adj signaling)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:44			0
3	BRS	L3	0	1 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:45			0
4	BRS	L4	3	MIR16	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:45			0
5	BRS	L5	0	2 same 3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:45			0

FILE 'HOME' ENTERED AT 09:48:59 ON 26 MAR 2003

=> file medline caplus biosis embase scisearch agricola		
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 09:49:22 ON 26 MAR 2003

FILE 'CAPLUS' ENTERED AT 09:49:22 ON 26 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 09:49:22 ON 26 MAR 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 09:49:22 ON 26 MAR 2003
COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 09:49:22 ON 26 MAR 2003
COPYRIGHT (C) 2003 Institute for Scientific Information (ISI) (R)

FILE 'AGRICOLA' ENTERED AT 09:49:22 ON 26 MAR 2003

=> s glycerophosphodiester phosphodiesterase
L1 126 GLYCEROPHOSPHODIESTER PHOSPHODIESTERASE

=> s glycerophosphoryl diester phosphodiesterase
L2 52 GLYCEROPHOSPHORYL DIESTER PHOSPHODIESTERASE

=> s l1 or l2
L3 170 L1 OR L2

=> s regulator (p) (g protein signaling)
L4 1882 REGULATOR (P) (G PROTEIN SIGNALING)

=> s l1 (p) l4
L5 6 L1 (P) L4

=> duplicate remove l5
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L5
L6 3 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> d l6 1-3 ibib abs

L6	ANSWER 1 OF 3	MEDLINE	DUPLICATE 1
ACCESSION NUMBER:	2003090411	IN-PROCESS	
DOCUMENT NUMBER:	22480346	PubMed ID: 12576545	
TITLE:	GDE1/MIR16 is a glycerophosphoinositol phosphodiesterase regulated by stimulation of G protein-coupled receptors.		
AUTHOR:	Zheng Bin; Berrie Christopher P; Corda Daniela; Farquhar Marilyn G		
CORPORATE SOURCE:	Department of Cellular and Molecular Medicine, University of California at San Diego, La Jolla, CA 92093-0651, USA.		
SOURCE:	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (2003 Feb 18) 100 (4) 1745-50. Journal code: 7505876. ISSN: 0027-8424.		
PUB. COUNTRY:	United States		
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)		
LANGUAGE:	English		
FILE SEGMENT:	IN-PROCESS; NONINDEXED; Priority Journals		
ENTRY DATE:	Entered STN: 20030227 Last Updated on STN: 20030227		

AB Previously we identified MIR16 (membrane interacting protein of RGS16) as an integral membrane glycoprotein that interacts with ***regulator*** of ***G*** ***protein*** ***signaling*** proteins and shares

significant sequence homology with bacterial ***glycerophosphodiester***
 phosphodiesterases (Es), suggesting that it is a putative
 mammalian GDE. Here we show that MIR16 belongs to a large, evolutionarily
 conserved family of GDEs with a characteristic putative catalytic domain
 that shares a common motif (amino acids 92-116) with the catalytic domains
 of mammalian phosphoinositide phospholipases C. Expression of wild-type
 MIR16 (renamed GDE1), but not two catalytic domain mutants (E97AD99A and
 H112A), leads to a dramatic increase in glycerophosphoinositol
 phosphodiesterase (GPI-PDE) activity in HEK 293T cells. Analysis of
 substrate specificity shows that GDE1MIR16 selectively hydrolyzes GPI over
 glycerophosphocholine. The GPI-PDE activity of GDE1MIR16 expressed in HEK
 293T cells can be regulated by stimulation of G protein-coupled, alpha
 beta-adrenergic, and lysophospholipid receptors. Membrane topology studies
 suggest a model in which the catalytic GDE domain faces the
 lumen/extracellular space and the C terminus faces the cytoplasm. Our
 results suggest that by serving as a PDE for GPI with its activity
 regulated by ***G*** ***protein*** ***signaling***, GDE1MIR16
 provides a link between phosphoinositide metabolism and G protein signal
 transduction.

L6 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 2000:240374 BIOSIS
 DOCUMENT NUMBER: PREV200000240374
 TITLE: MIR16, a putative membrane glycerophosphodiester
 phosphodiesterase, interacts with RGS16.
 AUTHOR(S): Zheng, Bin; Chen, Dan; Farquhar, Marilyn Gist (1)
 CORPORATE SOURCE: (1) Department of Cellular and Molecular Medicine,
 University of California San Diego, La Jolla, CA,
 92093-0651 USA
 SOURCE: Proceedings of the National Academy of Sciences of the
 United States of America, (April 11, 2000) Vol. 97, No. 8,
 pp. 3999-4004.
 ISSN: 0027-8424.
 DOCUMENT TYPE: Article
 LANGUAGE: English
 SUMMARY LANGUAGE: English

AB We have identified the protein MIR16 (for Membrane Interacting protein of
 RGS16) from a yeast two-hybrid screen by using RGS16 as bait. MIR16 shares
 strong homology with bacterial glycerophosphodiester phosphodiesterases.
 It interacts with RGS16 and, more weakly, with several other selected RGS
 proteins. Analysis of deletion mutants showed that the N-terminal region
 of the RGS domain in RGS16 is required for its interaction with MIR16.
 MIR16 is an integral membrane glycoprotein, because it remained associated
 with membrane fractions after alkaline treatment and because, in some
 cells, it is sensitive to digestion with endoglycosidase H. By
 immunofluorescence and immunoelectron microscopy, MIR16 was localized on
 the plasma membrane in liver and kidney and on intracellular membranes in
 rat pituitary and cultured pituitary cells. MIR16 represents the only
 integral membrane protein identified thus far to interact with an RGS
 domain and, to our knowledge, is the only mammalian glycerophosphodiester
 phosphodiesterase that has been cloned. The putative enzymatic activity of
 MIR16 and its interaction with RGS16 suggest that it may play important
 roles in lipid metabolism and in G protein signaling.

L6 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 2002:155792 BIOSIS
 DOCUMENT NUMBER: PREV200200155792
 TITLE: MIR16, a membrane glycerophosphodiester phosphodiesterase:
 Enzymatic activity, membrane topology and implications for
 membrane trafficking and signaling.
 AUTHOR(S): Zheng, Bin (1); Peters, Eugenia; Williams, Chester;
 Ferraris, Joan; Burg, Maurice; Schmieder, Sandra (1)
 CORPORATE SOURCE: (1) Department of Cellular and Molecular Medicine,
 University of California San Diego, 9500 Gilmar Dr.,
 CMM-West, Rm 218, La Jolla, CA, 92093-0651 USA
 SOURCE: Molecular Biology of the Cell, (Dec., 2000) Vol. 11, No.
 Supplement, pp. 485a. <http://www.molbiolcell.org/>. print.
 Meeting Info.: 40th American Society for Cell Biology
 Annual Meeting San Francisco, CA, USA December 09-13, 2000
 ISSN: 1059-1524.
 DOCUMENT TYPE: Conference
 LANGUAGE: English

=> d his

(FILE 'HOME' ENTERED AT 09:48:59 ON 26 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
09:49:22 ON 26 MAR 2003

L1	126 S GLYCEROPHOSPHODIESTER PHOSPHODIESTERASE
L2	52 S GLYCEROPHOSPHORYL DIESTER PHOSPHODIESTERASE
L3	170 S L1 OR L2
L4	1882 S REGULATOR (P) (G PROTEIN SIGNALING)
L5	6 S L1 (P) L4
L6	3 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	28.82	29.03

STN INTERNATIONAL LOGOFF AT 09:56:05 ON 26 MAR 2003